

REMARKS

Claims 1, 2, 4-12, 14 and 15 are pending in the applications.

Formal matters

Applicant thanks the Examiner for considering the reference submitted with the Information Disclosure Statement filed on November 13, 2006.

Claim rejections

Claims 1, 2, 4, 5, 7, 9, 12, and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chimoto et al. (US Publication No. 5838383A, hereafter “Chimoto”), in view of Schindler et al. (US Publication No. 6516467B1, hereafter “Schindler”). Claim 6 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chimoto, in view of Schindler, further in view of Trovato et al. (US 6469742B1, hereafter “Trovato”). Claims 8 and 15 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chimoto, in view of Schindler, further in view of Battini et al. (US 6919792B1, hereafter “Battini”). Applicant traverses these rejections at least for the following reasons.

Claims 1, 2, 4, 5, 7, 9, 12, and 14

In response to the Examiners rejection of claims 1, 2, 4, 5, 7, 9, 12, and 14 as allegedly being obvious over Chimoto in view of Schindler, Applicant submits that one of ordinary skill in the art would not have been motivated to modify the teachings of Chimoto based on the teachings of Schindler to produce the claimed invention at least for the following reasons.

In alleging motivation for combining the two references, the Examiner asserts that Chimoto teaches the claimed main board and the claimed extension board. Further, the Examiner contends that a transmission signal line and a selection signal line are inherently

taught. However, the Examiner also admits that each extension board does not have an MPEG transport stream line and an analog audio/video signal line.

In view of this deficiency, the Examiner asserts that Schindler discloses an MPEG transport steam line and an analog audio/video signal line. Further, the Examiner states that one of ordinary skill in the art at the time the invention was made would have been motivated to modify the modules disclosed by Chimoto to include the teachings of Schindler in order to reduce the number of modules to buy thereby leaving more available receptacles.

However, Chimoto discloses modules 303-308, **each of which are designated to perform specific functions**. These modules may either operate independently of one another or cooperate with each other to achieve different broadcasting services under the control of the DMA device 312 (col. 8, ln. 27-37).

For example, Chimoto discloses a digital cable module 306 for converting signal into stream of bits, a depacket processing module 305 to convert the bit stream into stream of MPEG data, an MPEG video module 307 to decode the video data stream into image data, and an MPEG audio module 308 to decode the audio data stream into speech data. The data output from each of the module is supplied on a bus 302 and transferred to each of the module through the DMA device 312 (col. 10, ln. 9-35).

On the other hand, Schindler discloses a VGA card 318 that can receive MPEG encoded video (col. 11, ln. 60) and other audio video inputs including NTSC compatible audio video signals (col. 12, ln. 13-23) in the **same VGA card 318**.

In light of the above, Applicant submits that one of ordinary skill in the art would not have been motivated to modify Chimoto based on Schindler to produce the claimed invention. Furthermore, Applicant submits that Chimoto teaches away from the Examiner's proposed

modification based on Schindler because Chimoto discloses a device which provides different modules designated to perform each step of conversion and decoding processes of various broadcasted signal that is received by a receiver. Moreover, the device requires each module to perform a specific function and the output of each module is supplied to a bus and transferred to the next module under the control of a DMA device. However, Schindler discloses a VGA card which processes MPEG data (both audio and video) and other audio video inputs. Therefore, Applicants submits the Examiner's proposed combination of the references is improper, and requests the Examiner to withdraw the rejections under 35 U.S.C. § 103(a).

Claims 6, 8 and 15

With regard to claims 6, Applicant submit that since claim 6 depend from claim 1 and since Trovato does not cure the above noted deficiency with respect to claim 1, claim 6 is allowable at least by virtue of its dependency.

With regard to 8, and 15, Applicant submit that since claims 8 and 15 depend from one of the independent claims mentioned above that have been shown to be allowable and since Battini does not cure the deficiency noted above with respect to claims 1 and 14, claims 8 and 15 are also allowable by virtue of their dependency and additional limitations thereof.

Claims 10 and 11

In response to the Applicant's Amendment on January 19, 2007, the Examiner admits that Trovato does disclose that modules identify themselves to the system. However, the Examiner contends that Whetsel discloses a system that performs test that sequentially scans the connectors to determine whether board is coupled to the backplane. Moreover, the Examiner asserts that "the connect mode to couple a board up to the backplane bus for scan access" (col. 14, ln. 44-52) allegedly suggests that a prior identification process was performed. Furthermore,

the Examiner alleges that an extra test would be useful in order to determine the presence of the board.

In response to the Examiner's response Applicant submits that that the Examiner is misinterpreting the teachings of Whetsel in column 14, line 44-52. Whetsel discloses that connect mode couples a board up to the backplane bus for scan access. This connection scan operation is executed by the bus controller to temporarily connect each target boards to the backplane bus (col 14, ln. 60-64). Furthermore, Applicant submits that one of ordinary skill in the art would not have been motivated to combine and modify the two references at least for the reasons given below.

In support of the rejection, the Examiner continues to assert that Trovato can be modified to include "sequentially scanning the connectors, as taught by Whetsel, in order to verify if the modules are still active and present over a period of time".

Trovato is directed towards an upgradable television which contains modules that are capable of identifying itself to a processor. Moreover, the processor becomes coupled to each of the modules (col. 1, ln. 59-64).

Whetsel is directed towards execution of test operations on a plurality of circuits. Whetsel discloses a method to verify the presence of boards in the backplane, in which a sequence of connection scan operations are executed to temporarily connect each targeted boards ASP to the backplane. The bus controller verifies to connection by testing the address returned in the acknowledge protocol. If the address test passes, the bus controller communicates with the connected board using 1149.1 scan operations to test the board. These operations are repeated as required to test the boards in the backplane (col 14, ln. 60 - col. 15, ln. 15).

Applicant submits Trovato teaches away from Whetsel because Trovato implements a system in which the modules identify themselves to the processor after which the processor is already coupled with the module. However, Whetsel discloses that the boards are disconnected from the backplane bus and the boards are temporarily coupled to the backplane bus each time the operation of verifying the presence of the board is performed, using the connection scan operations. Therefore, Applicant submits the Examiner's proposed combination of the references is improper, and requests the Examiner to withdraw the rejections under 35 U.S.C. § 103(a).

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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CUSTOMER NUMBER

Date: July 11, 2007